

A11101 294945

NAT'L INST OF STANDARDS & TECH R.I.C.



A11101294945

/Bulletin of the Bureau of Standards
QC1 .U5 V7:1911 C.2 NBS-PUB-C 1905

DEPARTMENT OF COMMERCE AND LABOR

BULLETIN

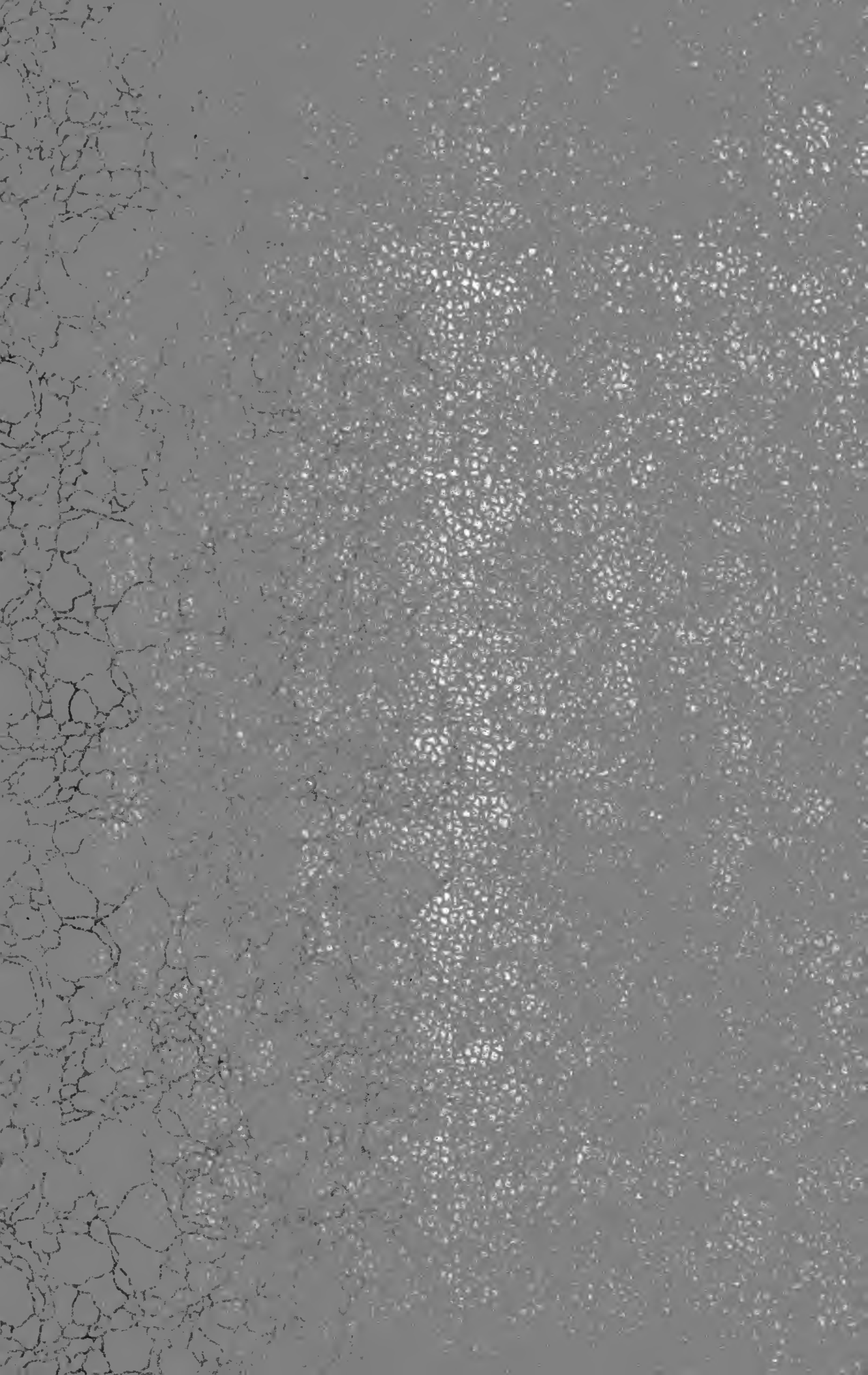
OF THE

BUREAU OF STANDARDS

VOLUME 7

1911









DEPARTMENT OF COMMERCE AND LABOR

BULLETIN
OF THE
BUREAU OF STANDARDS

S. W. STRATTON, DIRECTOR

VOLUME 7
1911



WASHINGTON
GOVERNMENT PRINTING OFFICE
1911

INDEX TO VOLUME 7

A

- Absorption bands, Standard, 661.
 Action of sunlight and air upon some lubricating oils, 227.
Agnew, P. G., Device for measuring the torque of electrical instruments, 45.
 Study of the current transformer with particular reference to iron loss, 423.
 Air, Action of, upon some lubricating oils, 227.
 Ammeters, Comparison of American direct-current switchboard, 407.
 Argon, Intensities of, in relation to current and pressure, 49.
Austin, L. W., Experiments with coupled high-frequency circuits, 301.
 Measurement of electrical oscillations in the receiving antenna, 295.
 Quantitative experiments in long-distance radiotelegraphy, 315.

B

- Bands, Oscillatory interference, 131.
 Behavior of high-boiling mineral oils on heating in the air, 365.
Bleining, A. V., Effect of preliminary heat treatment upon the drying of clays, 143.
 Boiling point of sulphur, 127.
Buckingham, Edgar, Steam-turbine expansion line on the Mollier diagram, and a short method of finding the reheat factor, 579.
Buckingham, Edgar, and J. H. Dellinger, Computation of the constant C_2 of Planck's equation, 393.

- Burgess, G. K., C. W. Waidner and*, Constancy of the sulphur boiling point, 127.
 Temperature scale between 100° and 500° C, 1.

C

- Cain, John R.*, Determination of vanadium and chrome-vanadium steels, 377.
 Capacity and phase difference of paraffined paper condensers as functions of temperature and frequency, 495.
Carhart, Henry S., Thermodynamics of concentration cells, 475.
Coblentz, W. W., Radiometric investigation of water of crystallization, light filters, and standard absorption bands, 619.
 Reflecting power of various metals, 197.
 Selective radiation from various substances, III, 243.
 Coefficient temperature of resistance of copper, 71.
 Commercial copper, Electrical conductivity of, 103.
 Comparison of American direct-current switchboard voltmeters and ammeters, 407.
 Computation of the constant C_2 of Planck's equation, 393.
 Concentration cells, Thermodynamics of, 475.
 Conductivity, Electrical, of commercial copper, 103.
 Constancy of the sulphur boiling point, 127.

Constant C_2 of Planck's equation, computation of, 393.

Copper, Electrical conductivity of commercial, 103.

Copper, Temperature coefficient of resistance of, 71.

Crehore, Albert C., George O. Squier and, Oscillatory interference bands and some practical applications, 131.

Crystallization, Radiometric investigation of water of, 619.

D

Dellinger, J. H., Temperature coefficient of resistance of copper, 71.

Dellinger, J. H., Edgar Buckingham and, Computation of the constant C_2 of Planck's equation, 393.

Dellinger, J. H., F. A. Wolff and, Electrical conductivity of commercial copper, 103.

Determination of vanadium in vanadium and chrome-vanadium steels, 377.

Device for measuring the torque of electrical instruments, 45.

Direct-current voltmeters and ammeters, Comparison of American, 407.

Drying of clays, Effect of preliminary heat treatment upon, 143.

E

Effect of preliminary heat treatment upon the drying of clays, 143.

Electrical instruments, Device for measuring the torque of, 45.

Electrical conductivity of commercial copper, 103.

Electrical oscillations, Measurement of, in the receiving antenna, 295.

Experiments with coupled high-frequency circuits, 301.

F

Fitch, T. T., and C. J. Huber, Comparison of American direct-current switchboard voltmeters and ammeters, 407.

Frequency, Capacity and phase difference of paraffined paper condensers as functions of temperature and, 495.

G

Grover, Frederick W., Capacity and phase difference of paraffined paper condensers as functions of temperature and frequency, 495.

H

Heat treatment, Effect of, upon the drying of clays, 143.

Helium lines, Intensities of, 49.

High-frequency circuits, Experiments with coupled, 301.

Huber, C. J., T. T. Fitch and, Comparison of American direct-current switchboard voltmeters and ammeters, 407.

Hydrogen lines, Intensities of, 49.

I

Intensities of some hydrogen, argon, and helium lines in relation to current and pressure, 49.

Interference bands, Oscillatory, and practical applications, 131.

Iron loss, Study of the current transformer with reference to, 423.

L

Light filters, Radiometric investigation of, 655.

Lubricating oils, Action of sunlight and air upon, 227.

M

Measurement of electrical oscillations in the receiving antenna, 295.

Metals, Reflecting power of, 197.

Middlekauff, George W., Direct reading candlepower scale and recording device for precision photometers, 11.

Mollier diagram, Steam-turbine expansion line on, 579.

N

- Nutting, P. G.*, Photometric attachment for spectroscopes, 239.
 Visibility of radiation. Recalculation of König's date, 235.
Nutting, P. G., and Orin Tugman, Intensities of some hydrogen, argon, and helium lines in relation to current and pressure, 49.

O

- Oils, Action of sunlight and air upon lubricating, 227.
 Oils, Behavior of high-boiling mineral on heating in the air, 365.
 Oscillatory interference bands and some practical applications, 131.

P

- Paper condensers, paraffined, Capacity and phase difference of, 495.
 Paschen's method of equal ordinates, Computation of the constant C_2 of Planck's equation by an extension of, 393.
 Phase difference of paraffined paper condensers, 495.
 Photometric attachment for spectroscopes, 239.
 Planck's equation, Computation of the constant C_2 of, 393.
 Point, boiling, Constancy of the sulphur, 127.
 Practical applications, Oscillatory interference bands, 131.
 Preliminary heat treatment, Effect of, upon the drying of clays, 143.

Q

- Quantitative experiments in long-distance radiotelegraphy, 315.

R

- Radiation, Selective, from various substances, III, 243.
 Radiation, Visibility of, 235.

- Radiometric investigation of water of crystallization, light filters, and standard absorption bands, 619.
 Radiotelegraphy, Quantitative experiments in long-distance, 315.
 Recording device for precision photometers, 11.
 Reflecting power of various metals, 197.
 Reheat factor, A short method of finding, 579.
 Resistance of copper, Temperature coefficient of, 71.

S

- Scale, Direct-reading candlepower, 11.
 Selective radiation from various substances, III, 343.
Squier, George O., and Albert C. Crehore, Oscillatory interference bands, 131.
 Steam-turbine expansion line on the Mollier diagram, and a short method of finding the reheat factor, 579.
 Sulphur boiling point, Constancy of the, 127.
 Sunlight, Action of, upon some lubricating oils, 227.

T

- Temperature, Capacity and phase difference of paraffined paper condensers as functions of, 495.
 Temperature coefficient of resistance of copper, 71.
 Temperature scale between 100° and 500° C, 1.
 Thermodynamics of concentration cells, 475.
 Transformer, Study of the current, with particular reference to iron loss, 423.
 Treatment, Effect of heat, upon the drying of clays, 143.
Tugman, Orin, P. G. Nutting and, Intensities of some hydrogen, argon, and helium lines in relation to current and pressure, 49.

V

Vanadium, Determination of, in vanadium and chrome-vanadium steels, 377.

Visibility of radiation. Recalculation of König's date, 235.

Voltmeters, Comparison of American direct-current switchboard, 407.

W

Waidner, C. W., and G. K. Burgess, On the constancy of the sulphur boiling point, 127.

Waidner, C. W., and G. K. Burgess, Temperature scale between 100° and 500° C, 1.

Water of crystallization, Radiometric investigation of, 619.

Waters, C. E., Action of sunlight and air upon some lubricating oils, 227.

Behavior of high-boiling mineral oils on heating in the air, 365.

Wolff, F. A., and J. H. Dellinger, Electrical conductivity of commercial copper, 103.





